

NOTICES OF RECENT LITERATURE.

On the "Fundamental Bars" in Feathers. This term, adopted by Dr. Oscar Riddle, of the University of Chicago, applies to certain bars other than color bars, which may be found in many, perhaps most feathers. In their most pronounced form they are clearly defects in the formation of barbule or even barb elements. The subject has been studied by Drs. C. O. Whitman and R. M. Strong, of the University of Chicago, with special reference to the occurrences in pigeons and doves, and by Dr. J. E. Duerden, Professor of Zoology, Rhodes University College, Grahamstown, South Africa, with special reference to its occurrence in Ostriches and its possible eradication because of its injury to the ostrich plume industry, and by Dr. Oscar Riddle, of the University of Chicago, from a purely experimental stand point. The writer has also given some attention to the subject. The conclusion arrived at by all who have been named above is that these "Fundamental Bars" are due to malnutrition of the bird during the formation of the feather, and that in at least pronounced cases of such barring, all of the feathers of the plumage which are in process of formation during the period of malnutrition will be so barred, often in varying degree. It must be clear that the cause of malnutrition may be various. Experimentally the bars may be produced by starving the bird. Impaired health of the bird, due to whatever cause, has also been proved to produce bars.

L. J.

Food Habits of the Grosbeaks. By W. L. McAtee, U. S. Department of Agriculture, Bureau of Biological Survey, Bulletin No. 32.

In a detailed discussion of 92 pages, covering all of the Grosbeaks of the United States, the author concludes that while some of the species eat fruits and grains to some extent, their valuable services in destroying injurious insects far outweighs what little they destroy for the fruit-grower and the farmer. Scare-crows and wire nettings may be effectually employed to lessen their depredations without resorting to destruction of the birds.

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